

IN THE CLAIMS

1-14. (Canceled)

15. (Currently Amended) The computer system as claimed in ~~claim 13~~ claim 18, wherein, when a backup copy of data in a primary volume in said one storage is made to said backup storage in a non-disruptive manner, a secondary volume corresponding to the primary volume is created by internal functions in said one storage, copies are made from said primary volume to said secondary volume, the made copies are transferred from said secondary volume to said backup storage via said SAN without passing said LAN, and thereby backup is achieved.

16-17. (Canceled)

18. (Currently Amended) A computer system, ~~as claimed in claim 17,~~ comprising:

a plurality of client computers;  
a plurality of servers;  
a plurality of storages which have multiple disk drives  
and keep data in said plurality of disk drives;

a local area network (LAN) which connects said computers with said servers; and

a storage area network (SAN) which lies between said servers and said storages,

wherein said SAN forms a switched circuit network having fiber channel switches and arranged to connect any of said servers and any of said storages through said fiber channel switches, and said computer system comprising:

a terminal, which is connected to said LAN and equipped with operation and management software which performs storage management, including management of logical volumes in said storages, management of data arrangement including moving data in one of said logical volumes to another of said logical volumes, management of error monitoring for said storages, management of setting up said fiber channel switches, and management of a server-less backup operation for backing-up data directly from one of said storages to a backup storage of said storages via said SAN without relaying said data via any of said servers or said terminal;

wherein the operation and management software of said terminal realizes acquisition of statistical information of resources of said logical volumes; and

wherein the operation and management software of said terminal manages said logical volumes in said storages in accordance with said statistical information including usage of logical devices composing said logical volumes, said operation and management software predicting future usage of said logical devices given a proposed allocation of said logical devices based on said usage, and said operation and management software allocating said logical devices in response to a command based on said future usage prediction.

19. (Previously Presented) A computer system as claimed in claim 18, wherein in performing said management of error monitoring for said storages, said operation and management software of said terminal collects failure reports from said storages.

20. (Previously Presented) A computer system as claimed in claim 19, wherein in performing said management of setting up said fiber channel switches, said operation and management software of said terminal sets a plurality of respective zones of said fiber channel switches and assigns said zones to said servers so as to restrict access to said storages in accordance with the zone assignments.

21. (Previously Presented) A computer system as claimed in claim 20, wherein in performing said management of a server-less backup operation, said operation and management software of said terminal causes a replica of data, present in a logical volume assigned to one of said servers, to be created in a second logical volume; and causes a copy of said replica to be created in a backup storage without involvement of said server to which said logical volume is assigned.

22. (Currently Amended) The computer system as claimed in ~~claim 17~~ claim 21, wherein said SAN is connected to a SAN in another computer system via a wide area network (WAN).

23. (Currently Amended) A computer system, ~~as claimed in claim 13,~~ comprising:

a plurality of client computers;  
a plurality of servers;  
a plurality of storages which have multiple disk drives  
and keep data in said plurality of disk drives;  
a local area network (LAN) which connects said computers  
with said servers; and  
a storage area network (SAN) which lies between said  
servers and said storages,

wherein said SAN forms a switched circuit network having fiber channel switches and arranged to connect any of said servers and any of said storages through said fiber channel switches, and said computer system comprising:

a terminal, which is connected to said LAN and equipped with operation and management software which performs storage management, including management of logical volumes in said storages, management of data arrangement including moving data in one of said logical volumes to another of said logical volumes, management of error monitoring for said storages, management of setting up said fiber channel switches, and management of a server-less backup operation for backing-up data directly from one of said storages to a backup storage of said storages via said SAN without relaying said data via any of said servers or said terminal;

wherein the operation and management software of said terminal manages said logical volumes in said storages in accordance with usage of logical devices composing said logical volumes, information of said usage being obtained from said disk drives, said operation and management software predicting future usage of said logical devices given a proposed allocation of said logical devices based on said usage, and said operation and management software allocating

said logical devices in response to a command based on said future usage prediction.

24. (Previously Presented) A computer system as claimed in claim 23, wherein in performing said management of error monitoring for said storages, said operation and management software of said terminal collects failure reports from said storages.

25. (Previously Presented) A computer system as claimed in claim 24, wherein in performing said management of setting up said fiber channel switches, said operation and management software of said terminal sets a plurality of respective zones of said fiber channel switches and assigns said zones to said servers so as to restrict access to said storages in accordance with the zone assignments.

26. (Previously Presented) A computer system as claimed in claim 25, wherein in performing said management of a server-less backup operation, said operation and management software of said terminal causes a replica of data, present in a logical volume assigned to one of said servers, to be created in a second logical volume; and causes a copy of said

replica to be created in a backup storage without involvement of said server to which said logical volume is assigned.

27. (Previously Presented) The computer system as claimed in claim 26, wherein said SAN is connected to a SAN in another computer system via a wide area network (WAN).

28-36. (Canceled)